

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

ROGER P. JACKSON, M.D.,	)	
	)	
Plaintiff,	)	
	)	
v.	)	C.A. No.
	)	
SEASPINE HOLDINGS CORPORATION,	)	<b>JURY TRIAL DEMANDED</b>
	)	
Defendant.	)	

**COMPLAINT**

Roger P. Jackson, M.D. (hereinafter “Plaintiff” or “Dr. Jackson” or “Plaintiff Dr. Jackson”), an individual, by and through his attorneys, for his Complaint against SeaSpine Holdings Corporation, a Delaware corporation (hereinafter “Defendant” or “SeaSpine” or “Defendant SeaSpine”) hereby alleges as follows:

**PARTIES, JURISDICTION AND VENUE**

1. Plaintiff Roger P. Jackson, M.D. is an individual residing at 4706 W. 86<sup>th</sup> Street, Prairie Village, Kansas 66207.
2. Defendant SeaSpine is a Delaware Corporation having its principal place of business at 5770 Armada Drive, Carlsbad, California 92008. SeaSpine also has facilities in Irvine, California, Wayne, Pennsylvania and Lyon, France.
3. This action arises under the patent laws of the United States, Title 35 of the United States Code, 35 U.S.C. §§ 1 *et seq.* Consequently, this Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).
4. Venue is proper in this Court pursuant to 28 U.S.C. § 1391(b)(1) or (2). Venue is also proper in this Court pursuant to 28 U.S.C. § 1400(a) and (b).

5. Defendant SeaSpine is subject to personal jurisdiction in this Court under 28 U.S.C. § 1391 as SeaSpine is incorporated in the State where this District resides.

### **THE ASSERTED PATENTS**

6. Plaintiff Dr. Jackson is a pioneering surgeon who focuses on maladies of the spine and is also a prolific inventor in the spinal implant industry. Dr. Jackson has been awarded over three hundred thirty (330) United States patents during a career spanning four decades. Among his many innovations in the field of spinal surgery, Dr. Jackson has developed state-of-the-art patient positioning technologies and multiple spinal implant systems, including those that feature bone screws incorporating his patented enabling technologies, as well as instruments and methodologies for using the same. In particular, Plaintiff Dr. Jackson is the named inventor, sole owner and/or exclusive licensee of certain patents, specifically: U.S. Patent Nos. 10,722,273; 8,540,753; 10,561,445; 10,278,740; 10,064,660; 7,377,923; 10,588,667; and, 9,808,292. Collectively, these patents will be referred to herein as the “Asserted Patents.”

7. The Asserted Patents generally relate to spinal implants and systems used to fixate or align vertebrae of a patient. Each of the Asserted Patents has been duly and legally issued, is valid and enforceable pursuant to 35 U.S.C. § 282 and all right, title and interest is solely owned and/or exclusively licensed by Plaintiff Dr. Jackson.

8. Plaintiff Dr. Jackson has satisfied the requirements of 35 U.S.C. § 287(a). As Dr. Jackson does not manufacture and sell products covered by the Asserted Patents, he himself does not have an obligation under § 287(a) to mark. However, Dr. Jackson has licensees with contractual obligations to mark their products with certain of the Asserted Patents, as well as other patents, and those licensees do so.

9. Furthermore, Plaintiff Dr. Jackson provided actual notice of certain of the Asserted Patents to Defendant SeaSpine prior to the filing of this Complaint, as detailed below.

***U.S. Patent No. 10,722,273***

10. Plaintiff owns all right, title and interest in U.S. Patent No. 10,722,273 (hereinafter the `273 patent), entitled “Bone Anchor Assembly with Twist-In-Place Pressure Insert.” The `273 patent duly and lawfully issued on July 28, 2020, with Roger Jackson as the sole named inventor. The `273 patent issued from Application No. 16/371,423, which was filed on April 1, 2019 and on its face ultimately claims priority to Application No. 11/140,343, filed on May 27, 2005. A true and correct copy of the `273 patent is attached hereto as **Exhibit 1**.

***U.S. Patent No. 8,540,753***

11. Plaintiff owns all right, title and interest in U.S. Patent No. 8,540,753 (hereinafter the `753 patent), entitled “Polyaxial Bone Screw With Uploaded Threaded Shank and Method of Assembly and Use.” The `753 patent duly and lawfully issued on September 24, 2013, with Roger Jackson as the sole named inventor. The `753 patent issued from Application No. 10/958,743, which was filed on October 5, 2004 and claims priority to Application No. 10/408,935, filed on April 9, 2003, now U.S. Patent No. 6,964,666. A true and correct copy of the `753 patent is attached hereto as **Exhibit 2**.

***U.S. Patent No. 10,561,445***

12. Plaintiff owns all right, title and interest in U.S. Patent No. 10,561,445 (hereinafter the `445 patent), entitled “Pivotal Bone Anchor Assembly with Cannulated Shank Threaded Capture Connection and Compression Insert.” The `445 patent duly and lawfully issued on February 18, 2020, with Roger Jackson as the sole named inventor. The `445 patent issued from Application No. 16/403,950 filed on May 6, 2019 and ultimately claims priority to Provisional

Application No. 61/000,964 filed on Oct. 30, 2007. A true and correct copy of the '445 patent is attached hereto as **Exhibit 3.**

***U.S. Patent No. 10,278,740***

13. Plaintiff owns all right, title and interest in U.S. Patent No. 10,278,740 (hereinafter the '740 patent), entitled "Pivotal Bone Anchor Assembly with Cannulated Shank Threaded Capture Connection and Compression Insert." The '740 patent duly and lawfully issued on May 7, 2019 with Roger Jackson as the sole named inventor. The '740 patent issued from Application No. 15/960,792 which was filed on April 24, 2018 and ultimately claims priority to Provisional Application No. 61/000,964 filed on October 30, 2007. A true and correct copy of the '740 patent is attached hereto as **Exhibit 4.**

***U.S. Patent No. 10,064,660***

14. Plaintiff owns all right, title and interest in U.S. Patent No. 10,064,660 (hereinafter the '660 patent), entitled "Pivotal Bone Anchor Assembly with Interference Fit Insert." The '660 patent duly and lawfully issued on September 4, 2018 with Roger Jackson as the sole named inventor. The '660 patent issued from Application No. 15/702,442 filed on September 12, 2017 and ultimately claims priority to Application No. 11/140,343 which was filed on May 27, 2005 and is now U.S. Patent No. 7,776,067. A true and correct copy of the '660 patent is attached hereto as **Exhibit 5.**

***U.S. Patent No. 7,377,923***

15. Plaintiff owns substantially all rights and interest in U.S. Patent No. 7,377,923 to Purcell (hereinafter the '923 patent), entitled "Variable Angle Spinal Screw Assembly." Plaintiff acquired substantially all rights, title and interest in the '923 patent by way of an exclusive license

with the title holder of the '923 patent, AlphaTec Spine, Inc. A true and correct copy of this agreement, as amended, is attached hereto as **Exhibit 6.**

16. The '923 patent duly and lawfully issued on May 27, 2008 with Thomas Purcell, Don Hair and Tamas Frech as the named inventors. The '923 patent issued from Application No. 10/848,946, which was filed on May 19, 2004 and ultimately claims priority to Provisional Applications 60/527,060 (filed on December 4, 2003) and 60/472/578 (filed on May 22, 2003). A true and correct copy of the '923 patent is attached hereto as **Exhibit 7.**

***U.S. Patent No. 10,588,667***

17. Plaintiff owns substantially all rights and interest in U.S. Patent No. 10,588,667 (hereinafter the '667 patent), entitled "Top and Bottom Loadable Bone Screw Assembly with Direct Pivotal Engagement Between Shank Head and Receiver." Plaintiff acquired substantially all rights, title and interest in the '667 patent by way of an exclusive license with the title holder of the '923 patent, AlphaTec Spine, Inc. A true and correct copy of this agreement, as amended, is attached hereto as **Exhibit 6.**

18. The '667 patent duly and lawfully issued on March 17, 2020 with Thomas Purcell, Don Hair and Tamas Frech as the named inventors. The '667 patent issued from Application No. 16/386,022, which was filed on April 16, 2019, and ultimately claims priority to Provisional Application No. 60/527,060, which as filed on December 4, 2003, and Provisional Application No. 60/472,578, which was filed on May 22, 2003. A true and correct copy of the '667 patent is attached hereto as **Exhibit 8.**

***U.S. Patent No. 9,808,292***

19. Plaintiff owns all right, title and interest in U.S. Patent No. 9,808,292 (hereinafter the '292 patent), entitled "Cannulated Polyaxial Screw." The '292 patent duly and lawfully issued

on November 7, 2017 with Roger Jackson as the sole named inventor. The '292 patent issued from Application No. 14/868,213 which was filed on September 28, 2015 and ultimately claims priority to Provisional Application 61/000,954, filed on October 30, 2007. A true and correct copy of the '292 patent is attached hereto as **Exhibit 9**.

**SEASPINE'S UNAUTHORIZED USE OF THE ASSERTED PATENTS**

20. SeaSpine is a publicly traded medical device company listed on the NASDAQ and based in California.

21. SeaSpine is a “global medical technology company focused on the design, development and commercialization of surgical solutions for the treatment of patients suffering from spinal disorders.” See SeaSpine 2018 10K filing, dated March 1, 2019, attached hereto as **Exhibit 10** at p. 4. SeaSpine’s “spinal implant portfolio consists of an extensive line of products to facilitate spinal fusion in degenerative, minimally invasive surgery (MIS), and complex spinal deformity procedures.” *Id.*

22. According to its most recent 10K filing, SeaSpine “offer[s] a comprehensive portfolio of spinal fixation products for the cervical, thoracic and lumbar regions of the spine, consisting of rods, screws, plates and instrumentation to facilitate spinal decompression and fusion. Our Mariner Posterior Fixation System is a pedicle screw system featuring modular threaded technology and accompanying instrumentation designed to reduce the number of trays needed for surgery and that provides surgeons with multiple intra-operative options to facilitate posterior lumbar fixation.” **Exhibit 10** at p. 8.

23. The Mariner product is of particular importance to SeaSpine because it is a focus of SeaSpine’s future plans: “We are committed to supplementing our portfolio of orthobiologics and spinal implant products through continuous innovation and bringing next-generation products

to the market. Out development pipeline consists of modular MIS, revision and deformity systems *based on our Mariner platform technology....*” **Exhibit 10** at p. 9.

24. The SeaSpine Mariner screw product was first approved by the U.S. Food and Drug Administration in November of 2016. According to SeaSpine’s November 7, 2016 press release, expected a full commercial launch of the Mariner system in the first half of 2017. *See* <https://www.seaspine.com/news/seaspine-announces-510k-clearance-from-the-fda-of-mariner-posterior-fixation-system-initiated-first-commercial-cases/> (retrieved on Nov. 11, 2020). Further, according to this same release, Mariner represented a “state-of-the-art” design and was designed to reduce the number of trays needed for surgery, provide surgeons with multiple intra-operative options to facilitate posterior lumbar fixation and include in-situ modularity, motion limiting heads and rod versatility. *Id.*

25. According to SeaSpine’s most recent 10K filing with the SEC, SeaSpine’s spinal implant products (which includes the Mariner product) earn substantial revenue for SeaSpine. In the year ended 2018, SeaSpine had earned approximately \$68 million dollars worldwide from its spinal implants, up approximately 8.6% from the year 2017. **Exhibit 10** at 47.

26. In addition, Dr. Jackson personally provided actual notice to Defendant SeaSpine to SeaSpine’s CEO Keith Valentine on or about Wednesday October 25, 2017 at the NASS Meeting held in Orlando, Florida specifically in regards to Dr. Jackson’s threaded spherical shank head technology (which includes U.S. Patent No. 8,540,753). Mr. Valentine agreed at the time to look into the issue. Thereafter, Dr. Jackson and SeaSpine engaged in further discussions throughout the Summer of 2018. The purpose of these disclosures was to, again, provide notice to SeaSpine that it was engaging in the unauthorized use of Dr. Jackson’s spine implant inventions and exclusively owned technology protected by the ’753, ’292 and ’923 patents. Among other

products, the parties discussed SeaSpine's Mariner product in connection with these patents. At the conclusion of these discussions, SeaSpine indicated to Dr. Jackson that SeaSpine was not interested in taking a license to protect its Mariner product.

27. On September 15, 2020, Plaintiff Jackson again contacted SeaSpine in an attempt to grant SeaSpine a license to various patents owned and controlled by Dr. Jackson. In this communication, Dr. Jackson alerted SeaSpine to each of the Asserted Patents (among others) and pointed out that the Mariner product required such a license. SeaSpine again refused to accept a license.

28. As detailed below, fully assembled screw assemblies directly infringe all claims pursuant to 35 U.S.C. § 271(a), while the modularly assembled screws directly infringe certain claims under § 271(a), while indirectly infringing other claims under § 271(b). SeaSpine's sale of material components of the claims, as part of surgical trays contribute to the infringement of certain claims under § 271(c).

***The SeaSpine Mariner Product:***

29. According to SeaSpine's website, the "Mariner Pedicle Screw System is a premier pedicle screw system featuring modular threaded technology." SeaSpine touts several key features including "Modular Threaded Technology" and "Motion Limiting Technology." See [seaspine.com/products/mariner-pedicle-screw-system/](https://seaspine.com/products/mariner-pedicle-screw-system/) (retrieved November 11, 2020).



30. As can be seen below on the left, is an image of the Mariner screw product installed in a patient's spine (left) and the Mariner screw shank itself surrounded by available head options (right):



See [seaspine.com/products/mariner-pedicle-screw-system/](https://seaspine.com/products/mariner-pedicle-screw-system/) (retrieved November 11, 2020).

31. The Mariner screw product is sold as part of a system of trays, as shown in the exemplary image below:



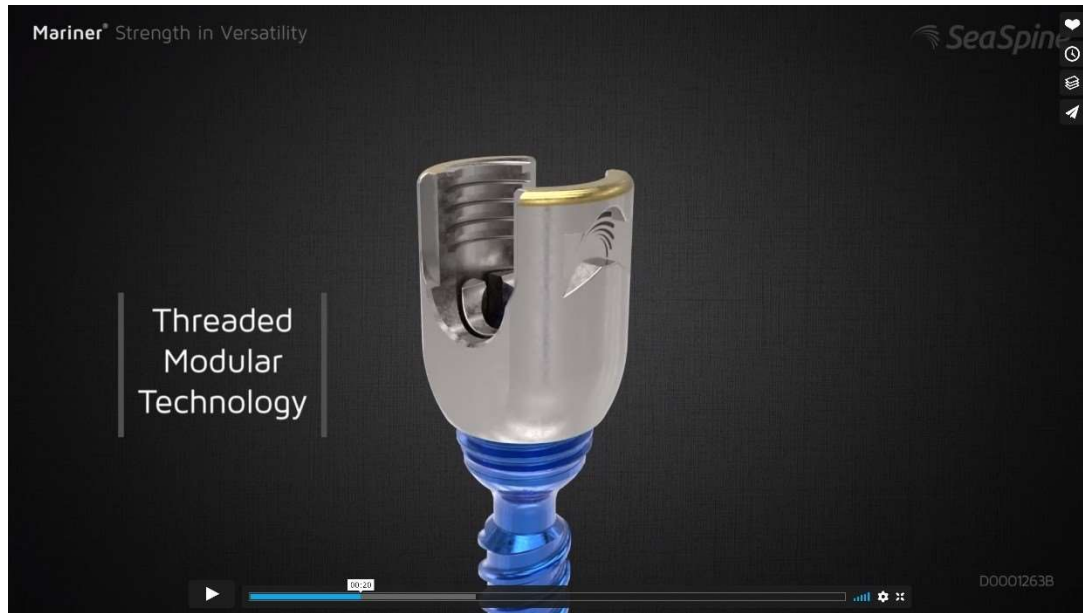
See [vimeo.com/289324525](https://vimeo.com/289324525) at 0:14 (SeaSpine's channel, retrieved November 11, 2020).

32. As can be seen below, the SeaSpine Mariner has a shank (blue) that is threaded along its length and on its upper end:



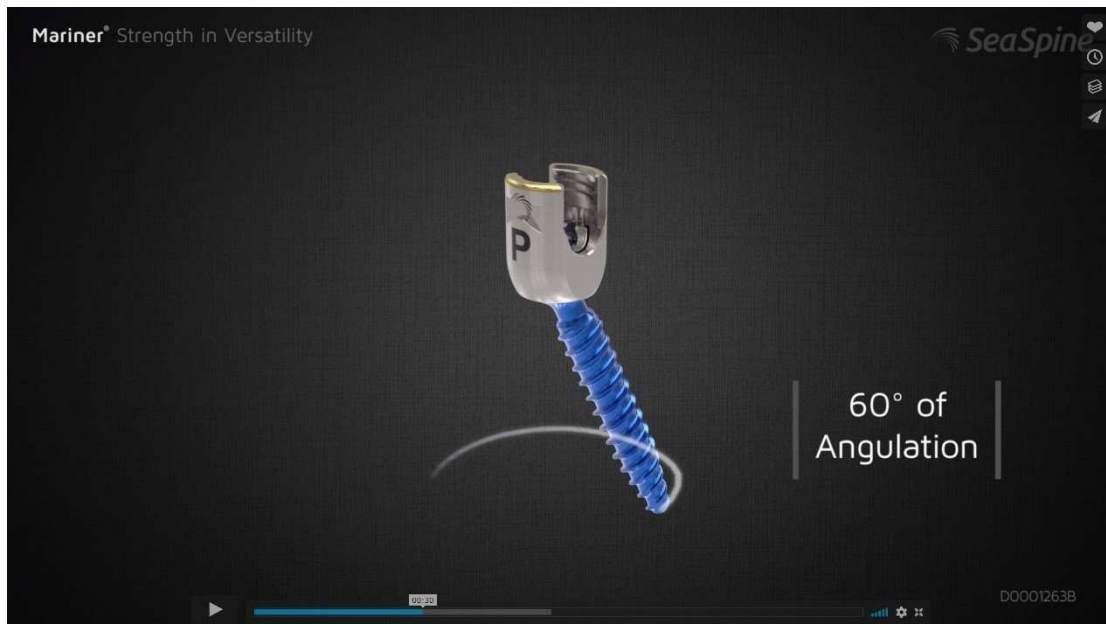
See [vimeo.com/289324525](https://vimeo.com/289324525) at 0:19 (SeaSpine's channel, retrieved November 11, 2020). Additionally, the silver Mariner head is also threaded to receive the threaded portion of the upper end of the blue shank. *Id.*

33. As can be seen as the video progresses, the blue shank is loaded from the bottom in an upward direction (relative to the silver head) using what SeaSpine refers to as “Threaded Modular Technology”:



See [vimeo.com/289324525](https://vimeo.com/289324525) at 0:20 (SeaSpine’s channel, retrieved November 11, 2020).

34. The Mariner screw product allows for different angular positioning of the shank relative to the head, which SeaSpine describes as “60° of Angulation”:



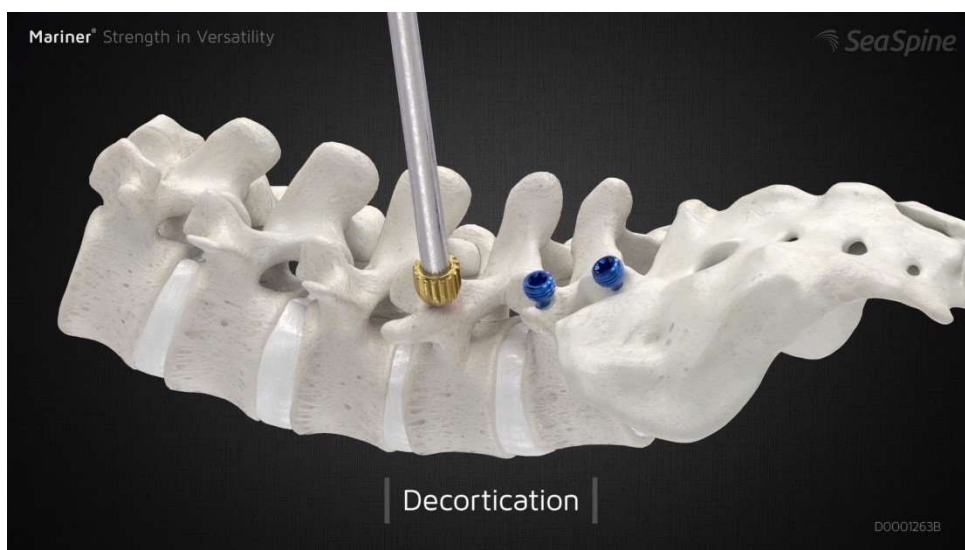
See [vimeo.com/289324525](https://vimeo.com/289324525) at 0:30 (SeaSpine's channel, retrieved November 11, 2020).

35. Through the use of different types of heads, the Mariner screw product can also provide differing "favored angles." As shown below, the "D" stamped heads provide for "Favored Angle Deformity Heads" (left) whereas the "T" stamped heads provide for "Favored Angle Trauma Heads" (right):



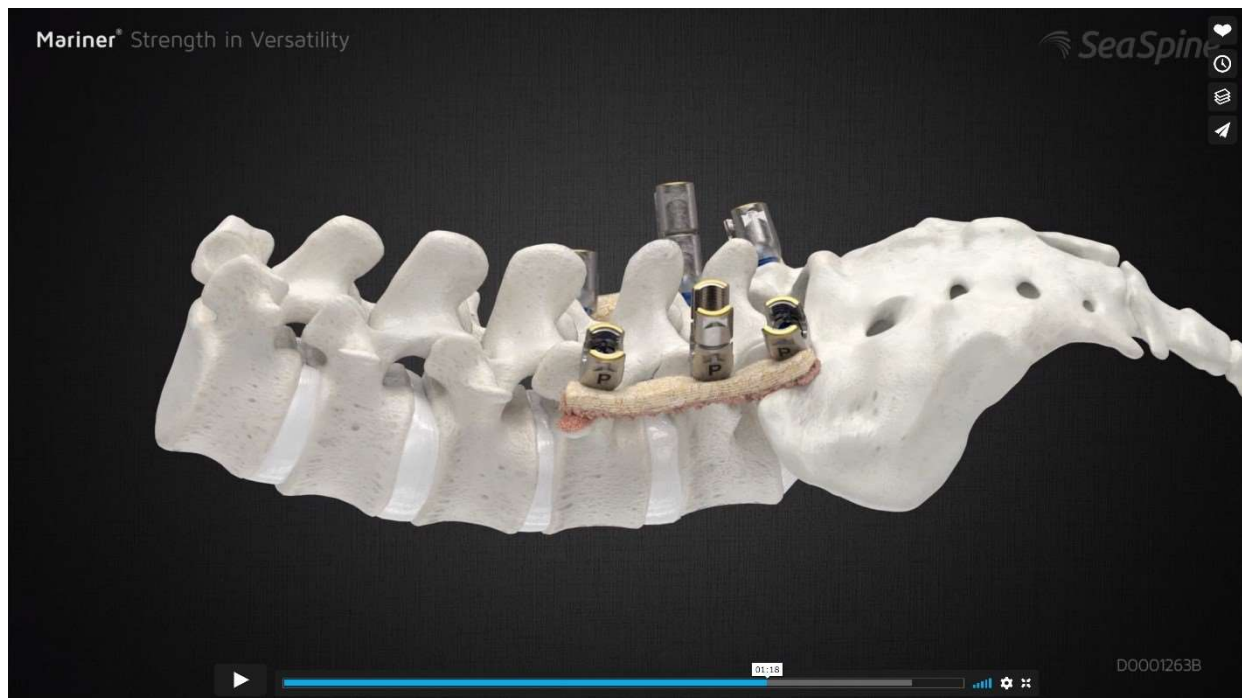
See [vimeo.com/289324525](https://vimeo.com/289324525) at 0:43, 0:46 (SeaSpine's channel, retrieved November 11, 2020).

36. As SeaSpine's video of the Mariner screw product depicts, during installation, the surgeon first installs the blue shanks into chosen locations in the patient's vertebrae and their depths are appropriately adjusted in a step called "Decortication":



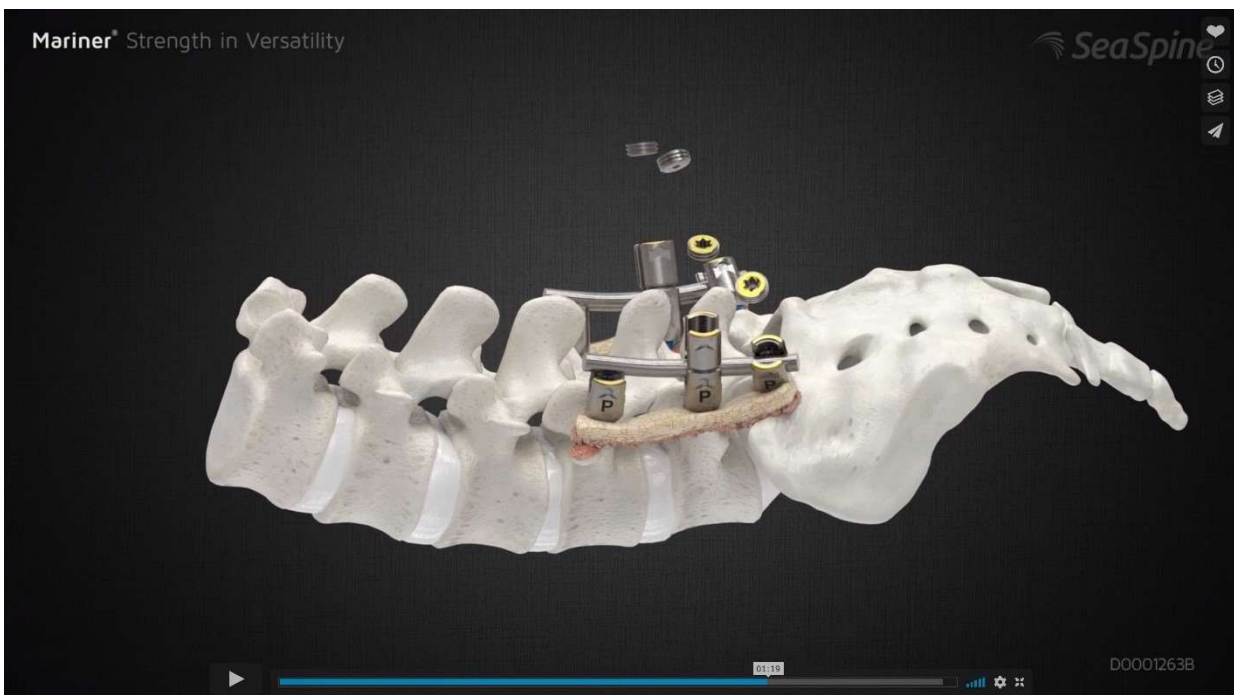
See [vimeo.com/289324525](https://vimeo.com/289324525) at 1:01 (SeaSpine's channel, retrieved November 11, 2020).

37. Then (in a fixation procedure) a bone-forming material (i.e., a demineralized bone matrix) is positioned and the appropriate heads are screwed into place atop the blue shanks:



See [vimeo.com/289324525](https://vimeo.com/289324525) at 1:18 (SeaSpine's channel, retrieved November 11, 2020).

38. Later, the fixation rods and certain inserts are put into place:





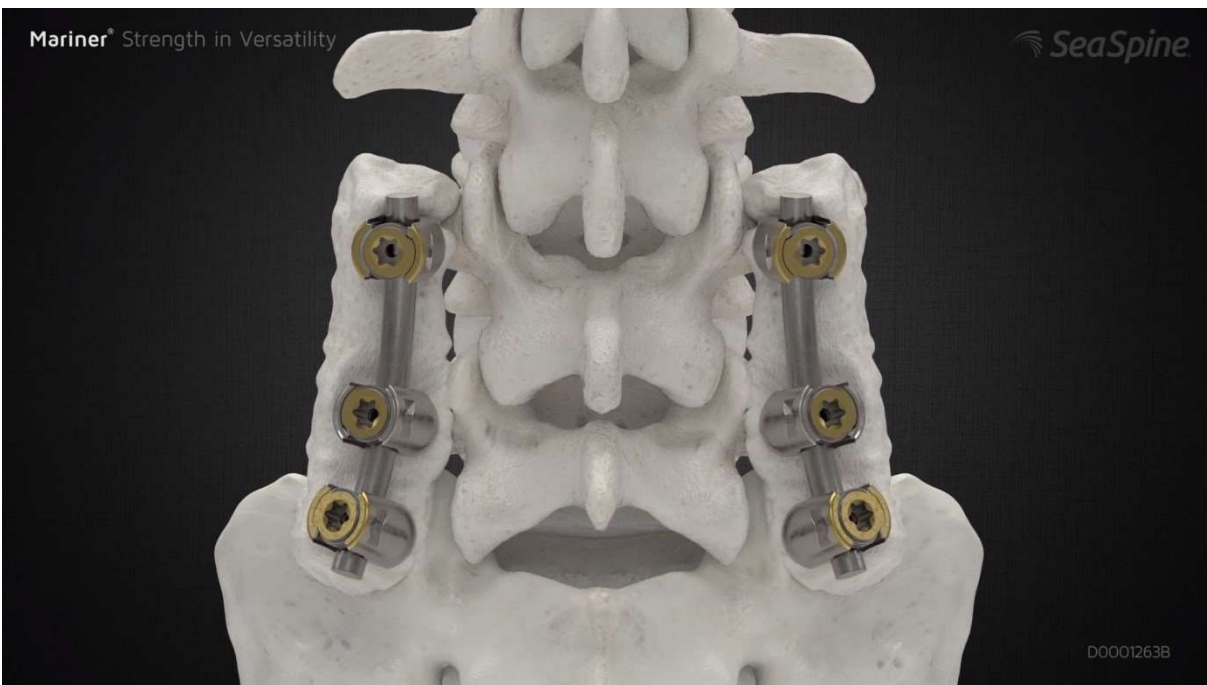
See [vimeo.com/289324525](https://vimeo.com/289324525) at 1:19 (SeaSpine's channel, retrieved November 11, 2020).

39. As needed, the surgeon adjusts the relative positioning of individual vertebrae:



See [vimeo.com/289324525](https://vimeo.com/289324525) at 1:28 through 1:30 (SeaSpine's channel, retrieved November 11, 2020). Thereafter, the final inserts are positioned to lock the fixation rod into place. *Id.* at 1:33.

40. Over time, the bone-forming mineralizes into new bone growth and the fixation of vertebrae is complete:



See [vimeo.com/289324525](https://vimeo.com/289324525) at 1:38 (SeaSpine's channel, retrieved November 11, 2020).

## **COUNT ONE**

### **Infringement of the '273 Patent**

41. Plaintiff repeats and realleges as if fully set forth herein, the allegations contained in all the preceding paragraphs ¶¶ 1 through 40.

42. As set forth below, SeaSpine has infringed and continues to infringe one or more claims of the '273 patent under 35 U.S.C. § 271 by manufacturing, providing, selling, offering to sell, importing and/or distributing without authority the Mariner screw products:

43. Specifically, the Mariner screw products comprise a “bone anchor assembly for securing an elongate rod to a bone” as set forth in claim 1 of the '273 patent. The claim chart attached hereto as **Exhibit 11** details how the Mariner screw product satisfies each and every limitation of *at least* claim 1 of the '273 patent either literally or under the doctrine of equivalents.

44. Further, when certain components of the Mariner screw products are implanted by a surgeon in order to treat one of several spine conditions the Mariner screw products also directly infringe *at least* claim 1 of the '273 patent.

45. SeaSpine had or should have had actual knowledge of the '273 patent and SeaSpine's unauthorized use thereof in the Mariner screw products.

46. SeaSpine had or should have had actual knowledge of the '273 patent and SeaSpine's unauthorized use thereof as Dr. Jackson offered a license to SeaSpine under the '273 patent at least as early as September of 2020.

47. For the same reasons, upon information and belief, SeaSpine has the specific intent to encourage surgeons to directly infringe *at least* claim 1 of the '273 patent by using and/or assembling components of the Mariner screw products as discussed above. SeaSpine provides the components used in the completed bone anchor assembly for the Mariner screw products along

with instructions and tools to accomplish this assembly. Consequently, SeaSpine induces the infringement of the '273 patent through at least its unauthorized sales of the Mariner screw products pursuant to 35 U.S.C. § 271(b).

48. SeaSpine's Mariner screw products and their systems can be sold as part of surgical trays. These components, such as the "shank," "receiver," "pressure insert," etc., as claimed, comprise material components of the "bone anchor assembly" of *at least* claim 1 of the '273 patent and are designed, configured and adapted to work with each other and have no substantial purpose other than as part of infringing devices and are accordingly not staple articles of commerce. Consequently, SeaSpine contributes to the infringement of the '273 patent through at least its unauthorized sales of the surgical trays incorporating the Mariner screw products pursuant to 35 U.S.C. § 271(c).

49. As outlined above, under the totality of the circumstances, SeaSpine's infringement of the '273 patent is willful from at least as early as September 15, 2020.

## **COUNT TWO**

### **Infringement of the '753 Patent**

50. Plaintiff repeats and realleges as if fully set forth herein, the allegations contained in all the preceding paragraphs ¶¶ 1 through 49.

51. As set forth below, SeaSpine has infringed and continues to infringe one or more claims of the '753 patent under 35 U.S.C. § 271 by manufacturing, providing, selling, offering to sell, importing and/or distributing without authority the Mariner screw products:

52. Specifically, the Mariner screw products comprise a "polyaxial bone screw assembly" as set forth in claims 1 and 14 of the '753 patent. The claim chart attached hereto as



**Exhibit 12** details how the Mariner screw product satisfies each and every limitation of *at least* claims 1 and 14 of the '753 patent either literally or under the doctrine of equivalents.

53. Further, when certain components of the Mariner screw products are implanted by a surgeon in order to treat one of several spine conditions the Mariner screw products also directly infringe *at least* claims 1 and 14 of the '753 patent.

54. SeaSpine had or should have had actual knowledge of the '753 patent and SeaSpine's unauthorized use thereof in the Mariner screw products.

55. SeaSpine had or should have had actual knowledge of the '753 patent and SeaSpine's unauthorized use thereof as Dr. Jackson offered a license to SeaSpine under the '753 patent in at least as early June of 2018.

56. For the same reasons, upon information and belief, SeaSpine has the specific intent to encourage surgeons to directly infringe *at least* claims 1 and 14 of the '753 patent by using and/or assembling components of the Mariner screw products as discussed above. SeaSpine provides the components used in the completed polyaxial bone anchor assembly for the Mariner screw products along with instructions and tools to accomplish this assembly. Consequently, SeaSpine induces the infringement of the '753 patent through at least its unauthorized sales of the Mariner screw products pursuant to 35 U.S.C. § 271(b).

57. SeaSpine's Mariner screw products and their systems can be sold as part of surgical trays. These components, such as the "shank," and "head," etc., as claimed, comprise material components of the "polyaxial bone anchor assembly" of *at least* claims 1 and 14 of the '753 patent and are designed, configured and adapted to work with each other and have no substantial purpose other than as part of infringing devices and are accordingly not staple articles of commerce. Consequently, SeaSpine contributes to the infringement of the '753 patent through at least its

unauthorized sales of the surgical trays incorporating the Mariner screw products pursuant to 35 U.S.C. § 271(c).

58. As outlined above, under the totality of the circumstances, SeaSpine's infringement of the '753 patent is willful from at least June of 2018.

### **COUNT THREE**

#### **Infringement of the '445 Patent**

59. Plaintiff repeats and realleges as if fully set forth herein, the allegations contained in all the preceding paragraphs ¶¶ 1 through 58.

60. As set forth below, SeaSpine has infringed and continues to infringe one or more claims of the '445 patent under 35 U.S.C. § 271 by manufacturing, providing, selling, offering to sell, importing and/or distributing without authority the Mariner screw products:

61. Specifically, the Mariner screw products comprise a "pivotal bone anchor assembly" as set forth in claims 1 and 27 of the '445 patent. The claim chart attached hereto as **Exhibit 13** details how the Mariner screw product satisfies each and every limitation of *at least* claims 1 and 27 of the '445 patent either literally or under the doctrine of equivalents.

62. Further, when certain components of the Mariner screw products are implanted by a surgeon in order to treat one of several spine conditions the Mariner screw products also directly infringe *at least* claims 1 and 27 of the '445 patent.

63. SeaSpine had or should have had actual knowledge of the '445 patent and SeaSpine's unauthorized use thereof in the Mariner screw products.

64. SeaSpine had or should have had actual knowledge of the '445 patent and SeaSpine's unauthorized use thereof as Dr. Jackson offered a license to SeaSpine under the '445 patent at least as early as September 15, 2020.

65. For the same reasons, upon information and belief, SeaSpine has the specific intent to encourage surgeons to directly infringe *at least* claims 1 and 27 of the '445 patent by using and/or assembling components of the Mariner screw products as discussed above. SeaSpine provides the components used in the completed bone anchor assembly for the Mariner screw products along with instructions and tools to accomplish this assembly. Consequently, SeaSpine induces the infringement of the '445 patent through at least its unauthorized sales of the Mariner screw products pursuant to 35 U.S.C. § 271(b).

66. SeaSpine's Mariner screw products and their systems can be sold as part of surgical trays. These components, such as the "receiver" and "anchor," etc., as claimed, comprise material components of the "pivotal bone anchor assembly" of *at least* claims 1 and 27 of the '445 patent and are designed, configured and adapted to work with each other and have no substantial purpose other than as part of infringing devices and are accordingly not staple articles of commerce. Consequently, SeaSpine contributes to the infringement of the '445 patent through at least its unauthorized sales of the surgical trays incorporating the Mariner screw products pursuant to 35 U.S.C. § 271(c).

67. As outlined above, under the totality of the circumstances, SeaSpine's infringement of the '445 patent is willful from at least as early as September 15, 2020.

#### **COUNT FOUR**

##### **Infringement of the '740 Patent**

68. Plaintiff repeats and realleges as if fully set forth herein, the allegations contained in all the preceding paragraphs ¶¶ 1 through 67.

69. As set forth below, SeaSpine has infringed and continues to infringe one or more claims of the '740 patent under 35 U.S.C. § 271 by manufacturing, providing, selling, offering to sell, importing and/or distributing without authority the Mariner screw products:

70. Specifically, the Mariner screw products comprise a “pivotal bone anchor assembly” as set forth in claim 1 of the '740 patent. The claim chart attached hereto as **Exhibit 14** details how the Mariner screw product satisfies each and every limitation of *at least* claim 1 of the '740 patent either literally or under the doctrine of equivalents.

71. Further, when certain components of the Mariner screw products are implanted by a surgeon in order to treat one of several spine conditions the Mariner screw products also directly infringe *at least* claim 1 of the '740 patent.

72. SeaSpine had or should have had actual knowledge of the '740 patent and SeaSpine's unauthorized use thereof in the Mariner screw products.

73. SeaSpine had or should have had actual knowledge of the '740 patent and SeaSpine's unauthorized use thereof as Dr. Jackson offered a license to SeaSpine under the '740 patent at least as early as September 15, 2020.

74. For the same reasons, upon information and belief, SeaSpine has the specific intent to encourage surgeons to directly infringe *at least* claim 1 of the '740 patent by using and/or assembling components of the Mariner screw products, as discussed above. SeaSpine provides the components used in the completed bone anchor assembly for the Mariner screw products along with instructions and tools to accomplish this assembly. Consequently, SeaSpine induces the infringement of the '740 patent through at least its unauthorized sales of the Mariner screw products pursuant to 35 U.S.C. § 271(b).

75. SeaSpine’s Mariner screw products and their systems can be sold as part of surgical trays. These components, such as the “receiver,” “anchor” and “insert,” etc., as claimed, comprise material components of the “bone anchor assembly” of *at least* claim 1 of the ’740 patent and are designed, configured and adapted to work with each other and have no substantial purpose other than as part of infringing devices and are accordingly not staple articles of commerce. Consequently, SeaSpine contributes to the infringement of the ’740 patent through at least its unauthorized sales of the surgical trays incorporating the Mariner screw products pursuant to 35 U.S.C. § 271(c).

76. As outlined above, under the totality of the circumstances, SeaSpine’s infringement of the ’740 patent is willful from at least September 15, 2020.

### **COUNT FIVE**

#### **Infringement of the ’660 Patent**

77. Plaintiff repeats and realleges as if fully set forth herein, the allegations contained in all the preceding paragraphs ¶¶ 1 through 76.

78. As set forth below, SeaSpine has infringed and continues to infringe one or more claims of the ’660 patent under 35 U.S.C. § 271 by manufacturing, providing, selling, offering to sell, importing and/or distributing without authority the Mariner screw products:

79. Specifically, the Mariner screw products comprise a “pivotal bone anchor assembly” as set forth in claim 28 of the ’660 patent. The claim chart attached hereto as **Exhibit 15** details how the Mariner screw product satisfies each and every limitation of *at least* claim 28 of the ’660 patent either literally or under the doctrine of equivalents.

80. Further, when certain components of the Mariner screw products are implanted by a surgeon in order to treat one of several spine conditions the Mariner screw products also directly infringe *at least* claim 28 of the '660 patent.

81. SeaSpine had or should have had actual knowledge of the '660 patent and SeaSpine's unauthorized use thereof in the Mariner screw products.

82. SeaSpine had or should have had actual knowledge of the '660 patent and SeaSpine's unauthorized use thereof as Dr. Jackson offered a license to SeaSpine under the '660 patent at least as early as September 15, 2020.

83. For the same reasons, upon information and belief, SeaSpine has the specific intent to encourage surgeons to directly infringe *at least* claim 28 of the '660 patent by using and/or assembling components of the Mariner screw products, as discussed above. SeaSpine provides the components used in the completed bone anchor assembly for the Mariner screw products along with instructions and tools to accomplish this assembly. Consequently, SeaSpine induces the infringement of the '660 patent through at least its unauthorized sales of the Mariner screw products pursuant to 35 U.S.C. § 271(b).

84. SeaSpine's Mariner screw products and their systems can be sold as part of surgical trays. These components, such as the "shank," "receiver," "pressure insert," etc., as claimed, comprise material components of the "bone anchor assembly" of *at least* claim 28 of the '660 patent and are designed, configured and adapted to work with each other and have no substantial purpose other than as part of infringing devices and are accordingly not staple articles of commerce. Consequently, SeaSpine contributes to the infringement of the '660 patent through at least its unauthorized sales of the surgical trays incorporating the Mariner screw products pursuant to 35 U.S.C. § 271(c).

85. As outlined above, under the totality of the circumstances, SeaSpine's infringement of the '660 patent is willful from at least as early as September 15, 2020.

## **COUNT SIX**

### **Infringement of the '923 Patent**

86. Plaintiff repeats and realleges as if fully set forth herein, the allegations contained in all the preceding paragraphs ¶¶ 1 through 85.

87. As set forth below, SeaSpine has infringed and continues to infringe one or more claims of the '923 patent under 35 U.S.C. § 271 by manufacturing, providing, selling, offering to sell, importing and/or distributing without authority the Mariner screw products:

88. Specifically, the Mariner screw products comprise a "variable angle spinal screw assembly" as set forth in claim 1 of the '923 patent. The claim chart attached hereto as **Exhibit 16** details how the Mariner screw product satisfies each and every limitation of at least claim 1 of the '923 patent either literally or under the doctrine of equivalents.

89. Further, when certain components of the Mariner screw products are implanted by a surgeon in order to treat one of several spine conditions the Mariner screw products also directly infringe at least claim 1 of the '923 patent.

90. SeaSpine had or should have had actual knowledge of the '923 patent and SeaSpine's unauthorized use thereof the Mariner screw products.

91. SeaSpine had or should have had actual knowledge of the '923 patent and SeaSpine's unauthorized use thereof as Dr. Jackson offered a license to SeaSpine under the '923 patent at least as early as June of 2018.

92. For the same reasons, upon information and belief, SeaSpine has the specific intent to encourage surgeons to directly infringe at least claim 28 of the '923 patent by using and/or

assembling components of the Mariner screw products, as discussed above. SeaSpine provides the components used in the completed bone anchor assembly for the Mariner screw products along with instructions and tools to accomplish this assembly. Consequently, SeaSpine induces the infringement of the '923 patent through at least its unauthorized sales of the Mariner screw products pursuant to 35 U.S.C. § 271(b).

93. SeaSpine's Mariner screw products and their systems can be sold as part of surgical trays. These components, such as the "pedicle screw" and "body member" etc., as claimed, comprise material components of the "variable angle spinal assembly" of at least claim 1 of the '923 patent and are designed, configured and adapted to work with each other and have no substantial purpose other than as part of infringing devices and are accordingly not staple articles of commerce. Consequently, SeaSpine contributes to the infringement of the '923 patent through at least its unauthorized sales of the surgical trays incorporating the Mariner screw products pursuant to 35 U.S.C. § 271(c).

94. As outlined above, under the totality of the circumstances, SeaSpine's infringement of the '923 patent is willful from at least as early as June of 2018.

## **COUNT SEVEN**

### ***Infringement of the '667 Patent***

95. Plaintiff repeats and realleges as if fully set forth herein, the allegations contained in all the preceding paragraphs ¶¶ 1 through 94.

96. As set forth below, SeaSpine has infringed and continues to infringe one or more claims of the '667 patent under 35 U.S.C. § 271 by manufacturing, providing, selling, offering to sell, importing and/or distributing without authority the Mariner screw products:



97. Specifically, the Mariner screw products comprise a “spinal screw assembly” as set forth in claim 1 of the ‘667 patent. The claim chart attached hereto as **Exhibit 17** details how the Mariner screw product satisfies each and every limitation of at least claim 1 of the ‘667 patent either literally or under the doctrine of equivalents.

98. Further, when certain components of the Mariner screw products are implanted by a surgeon in order to treat one of several spine conditions the Mariner screw products also directly infringe at least claim 1 of the ‘667 patent.

99. SeaSpine had or should have had actual knowledge of the ‘667 patent and SeaSpine’s unauthorized use thereof the Mariner screw products.

100. SeaSpine had or should have had actual knowledge of the ‘667 patent and SeaSpine’s unauthorized use thereof as Dr. Jackson offered a license to SeaSpine under the ‘667 patent at least as early as June of 2018.

101. For the same reasons, upon information and belief, SeaSpine has the specific intent to encourage surgeons to directly infringe at least claim 1 of the ‘667 patent by using and/or assembling components of the Mariner screw products, as discussed above. SeaSpine provides the components used in the completed bone anchor assembly for the Mariner screw products along with instructions and tools to accomplish this assembly. Consequently, SeaSpine induces the infringement of the ‘667 patent through at least its unauthorized sales of the Mariner screw products pursuant to 35 U.S.C. § 271(b).

102. SeaSpine’s Mariner screw products and their systems can be sold as part of surgical trays. These components, such as the “screw” and “body member” and “bushing” etc., as claimed, comprise material components of the “spinal screw assembly” of at least claim 1 of the ‘667 patent and are designed, configured and adapted to work with each other and have no substantial purpose

other than as part of infringing devices and are accordingly not staple articles of commerce. Consequently, SeaSpine contributes to the infringement of the '667 patent through at least its unauthorized sales of the surgical trays incorporating the Mariner screw products pursuant to 35 U.S.C. § 271(c).

103. As outlined above, under the totality of the circumstances, SeaSpine's infringement of the '923 patent is willful from at least as early as June of 2018.

### **COUNT EIGHT**

#### ***Infringement of the '292 Patent***

104. Plaintiff repeats and realleges as if fully set forth herein, the allegations contained in all the preceding paragraphs ¶¶ 1 through 103.

105. As set forth below, SeaSpine has infringed and continues to infringe one or more claims of the '292 patent under 35 U.S.C. § 271 by manufacturing, providing, selling, offering to sell, importing and/or distributing without authority the Mariner screw products:

106. Specifically, the Mariner screw products comprise a "cannulated polyaxial bone anchor assembly" as set forth in claim 1 of the '292 patent. The claim chart attached hereto as **Exhibit 18** details how the Mariner screw product satisfies each and every limitation of at least claim 1 of the '292 patent either literally or under the doctrine of equivalents.

107. Further, when certain components of the Mariner screw products are implanted by a surgeon in order to treat one of several spine conditions the Mariner screw products also directly infringe at least claim 1 of the '292 patent.

108. SeaSpine had or should have had actual knowledge of the '292 patent and SeaSpine's unauthorized use thereof the Mariner screw products.

109. SeaSpine had or should have had actual knowledge of the '292 patent and SeaSpine's unauthorized use thereof as Dr. Jackson offered a license to SeaSpine under the '292 patent at least as early as June of 2018.

110. For the same reasons, upon information and belief, SeaSpine has the specific intent to encourage surgeons to directly infringe at least claim 1 of the '292 patent by using and/or assembling components of the Mariner screw products, as discussed above. SeaSpine provides the components used in the completed bone anchor assembly for the Mariner screw products along with instructions and tools to accomplish this assembly. Consequently, SeaSpine induces the infringement of the '292 patent through at least its unauthorized sales of the Mariner screw products pursuant to 35 U.S.C. § 271(b).

111. SeaSpine's Mariner screw products and their systems can be sold as part of surgical trays. These components, such as the "anchor member" and "head etc., as claimed, comprise material components of the "spinal screw assembly" of at least claim 1 of the '292 patent and are designed, configured and adapted to work with each other and have no substantial purpose other than as part of infringing devices and are accordingly not staple articles of commerce. Consequently, SeaSpine contributes to the infringement of the '292 patent through at least its unauthorized sales of the surgical trays incorporating the Mariner screw products pursuant to 35 U.S.C. § 271(c).

112. As outlined above, under the totality of the circumstances, SeaSpine's infringement of the '923 patent is willful from at least as early as June of 2018.

#### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiff respectfully requests that the Court:

- A. Hold that Defendant SeaSpine has infringed one or more claims of the Asserted Patents pursuant to 35 U.S.C. § 271.
- B. Preliminarily and permanently enjoin Defendant SeaSpine as well as its respective agents, servants, officers, directors, employees and all other persons or entities acting in concert with them, directly or indirectly, from infringing, inducing others to infringe, or contributing to the infringement of the Asserted Patents pursuant to 35 U.S.C. § 283.
- C. Order Defendant SeaSpine to account for and pay to Plaintiff damages as a consequence of Defendant's infringement of the Asserted Patents, as available to Plaintiff, under 35 U.S.C. § 284.
- D. Find that Defendant SeaSpine's infringement is willful and accordingly award Plaintiff enhanced damages in accordance with 35 U.S.C. § 284.
- E. Declare this case exceptional pursuant to 35 U.S.C. § 285 and award Plaintiff reasonable attorneys' fees and costs in this action.
- F. Award to Plaintiff its costs, expenses, disbursements, and attorneys' fees incurred herein.
- G. Award to Plaintiff pre-judgment and post-judgment interest on the foregoing amounts at the maximum rate recoverable by law.
- H. Award to Plaintiff such other and further relief as the Court deems just and proper.

**DEMAND FOR JURY TRIAL**

Plaintiff Roger P. Jackson, M.D. demand trial by jury of all issues triable by a jury.

OF COUNSEL:

Thomas Gemmell  
Mark Deming  
Randy Alexander  
POLSINELLI PC  
150 N. Riverside Plaza, Suite 3000  
Chicago, IL 60606  
Phone: 404-253-6000  
Fax: 312-819-1910  
tgemmell@polsinelli.com  
mdeming@polsinelli.com  
ralexander@polsinelli.com

Aaron M. Levine  
POLSINELLI PC  
1000 Louisiana St., 64<sup>th</sup> Floor  
Houston, TX 77002  
Phone: 404-253-6000  
Fax: 713-374-1601  
alevine@polsinelli.com

December 30, 2020

POLSINELLI PC

/s/ Stephen J. Kraftschik

Stephen J. Kraftschik (#5623)  
Christina B. Vavala (#6135)  
222 Delaware Avenue, Suite 1101  
Wilmington, DE 19801  
(302) 252-0920  
skraftschik@polsinelli.com  
cvavala@polsinelli.com

*Attorneys for Plaintiff Roger P. Jackson,  
M.D.*